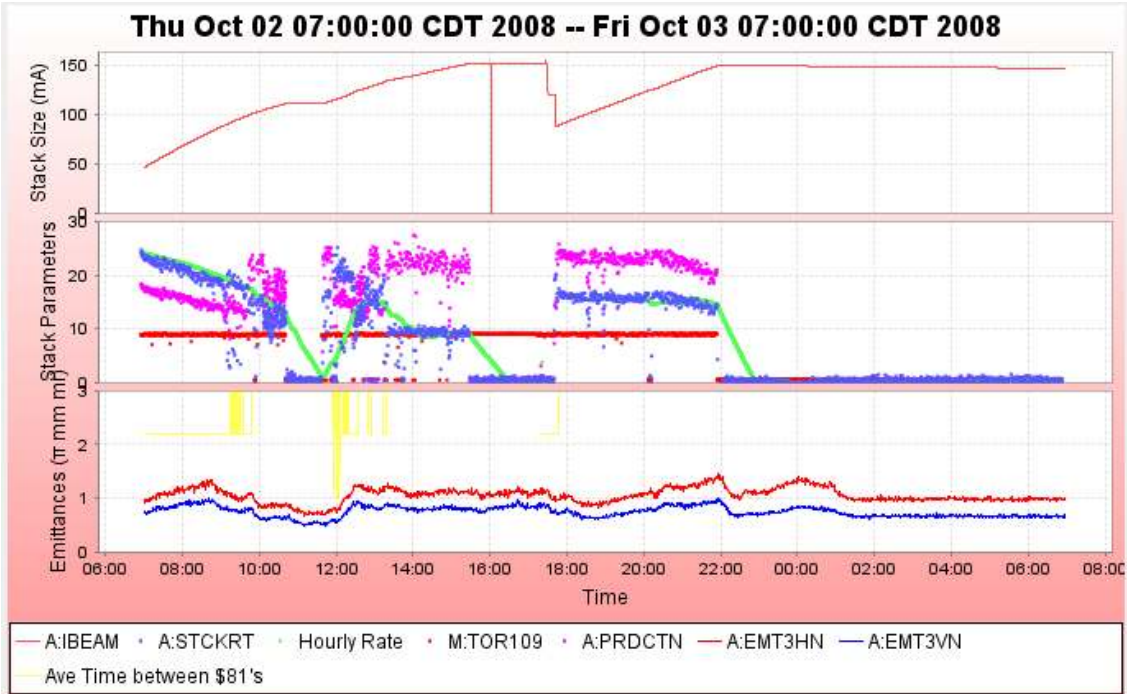


Stacking

- Performance Numbers
 - Best stacking hour 24.02mA.
 - Average Production 19.6e-6/proton
 - Stacked only 191mA in the last 24 hours.
 - Stack rate down and production up due to stacking to large stack sizes.
 - The Pbar TWT front ends use multicast-only TCLK. Tuesday morning version 4, which is an older protocol version of multicast TCLK was turned off. This is when the Datalogger plots broke. Charlie turned back on version 4 of mulicast TCLK and everything works again. Since things are working again, we no longer need to schedule the reboots.
- Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=419&frame=2&anchor=&hilite=&load=>>



Transfers

- Unstacked 63.01mA over two transfers in one set.
 - Acc to RR efficiency was 93.5%.

Column	Column 4 Number_3_Transfer Time	Column	Column	Unstacked	Column	Column	Stashed	Acc to RR	Column	Column	Acc to MI	Acc to	Tran	Sets
1		21	22	(mA)	23	24		Eff	n 27	n 28	Eff	MI2 Eff	sfer	
Number		Number	Number		Number	Number			Numb	Numb			s	
_0_Pbar		_20_A:IB	_21_A:IB		_22_R:BE	_23_R:BE			_MI	_MI				
	Totals=>	7:00:00 AM		63.10			59.03	93.55%	61.35	60.96	97.23%	96.60%	2	1

Studies

- core 4-8 vertical transfer functions (<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=421&scroll=false&load=>). Will follow up with further core vertical measurements before the shutdown.

Requests

- **Delta Kicker Tuning:** This is a mostly parasitic study that can be done during stacking. Jim Morgan will be the studier and he plans on looking for a time Friday evening to do this study.
- **Core Vertical Transfer Function Measurements:** This is ~15 minutes without stacking, with any stack size. The studiers will be Ralph and/or Steve. We can look for a naturally occurring period of downtime to do this study. Done.
- **Core Vertical Cooling Studies:** This requires no stacking for 1 to 2 hours, and can be done with whatever beam is leftover after transfers. This study requires turning off core transverse cooling, blowing up the beam and cooling it back down for each band. If naturally occurring downtime long enough to complete this study does not happen before Sunday, then we would shoot to complete this study after the last set of transfers to Recycler on Sunday evening. Ideally the studiers would be Ralph and Steve, but they may not be available on Sunday evening so we may have to find a substitute such as JPM.
- Also have a few hours of studies we can do with circulating beam before we turn off.

The Numbers

- Paul's Numbers
 - Most in an hour: 24.02 mA at Thu Oct 02 06:52:55 CDT 2008
 - Best: 27.01 mA on 03-Jun-08
 - Average Production 19.62 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
 - Average Protons on Target 8.16 e12 Best: 8.77 e12 on 07/24/2007
 - Largest Stack 152.69 mA Best: 313.58 mA on 02/18/2008
- Al's numbers
 - Stacking
 - Pbars stacked: 191.91 E10
 - Time stacking: 13.62 Hr
 - Average stacking rate: 14.09 E10/Hr
 - Uptime
 - Number of pulses while in stacking mode: 12686
 - Number of pulses with beam: 12121
 - Fraction of up pulses was: 95.55%
 - The uptime's effect on the stacking numbers
 - Corrected time stacking: 13.01 Hr
 - Possible average stacking rate: 14.75 E10/Hr
 - Could have stacked: 200.86 E10/Hr
 - Recycler Transfers
 - Pbars sent to the Recycler: 63.10 E10
 - Number of transfers : 2
 - Number of transfer sets: 1
 - Average Number of transfer per set: 2.00
 - Time taken to shoot including reverse proton tuneup: 00.02 Hr
 - Transfer efficiency: 59.06%
 - Other Info
 - Average POT : 8.25 E12
 - Average production: 19.20 pbars/E6 protons

* Red indicates a problem during data retrieval. See the message window for

details.

Misc